

AMENDMENTS TO THE CLAIMS

1-3 (Cancelled).

4. (Previously Presented) A method of collecting and separating a patient's blood and recovering a platelet-rich concentrate comprising:

(a) collecting the patient's blood using a needle set comprising a hollow needle coupled with a tubing having a fitting adapted to engage a first port in an elongated container fitted with a movable plunger having a second port therein;

(b) transferring said blood from the needle through the tubing, the fitting, and said first port into said elongated container by moving the plunger away from the first port;

(c) centrifuging said blood in said container and separating said blood into platelet-rich plasma and red blood cells;

(d) displacing the red blood cells separated in (c) from said container by moving said plunger towards said first port and expelling said red blood cells into a waste bag through tubing attached to said first port;

(e) removing said waste bag of (d) and centrifuging said platelet-rich plasma remaining in said container and separating a platelet-rich concentrate from a platelet-poor plasma;

(f) attaching a hollow plunger rod having a third port therein to said plunger and displacing the platelet-poor plasma separated in (e) from said container by moving said plunger towards said first port and expelling said platelet-poor plasma through said second port of said plunger and said third port of said plunger rod into a waste bag attached to the plunger rod; and

(g) recovering the platelet-rich concentrate separated in (e) and remaining in said container.

5. (Previously Presented) A method of collecting and separating a patient's blood and recovering a platelet-rich concentrate comprising:

(a) collecting the patient's blood using a needle set comprising a hollow needle having attached tubing and a fitting adapted to engage a first port in an elongated container fitted with a movable plunger having a second port therein;

- (b) opening a valve positioned within the first port;
- (c) transferring said blood through said first port into said elongated container by moving the plunger away from the first port;
- (d) closing the valve;
- (e) centrifuging said blood in said container and separating said blood into platelet-poor plasma, red blood cells, and platelet-rich concentrate;
- (f) displacing the red blood cells separated in (e) from said container by moving said plunger towards said first port and expelling said red blood cells into a waste bag through tubing attached to said first port;
- (g) removing said waste bag of (f) and attaching a hollow plunger rod having a third port therein to said plunger and displacing the platelet-poor plasma separated in (c) from said container by moving said plunger toward said first port and expelling said platelet-poor plasma through said second port of said plunger and said third port of said plunger rod into a waste bag attached to the plunger rod; and
- (h) recovering the platelet-rich concentrate separated in (e) and remaining in said container.

6-7 (Cancelled).

8. (Previously Presented) A method of Claim 4 wherein said centrifuging of step (c) is a soft spin.

9. (Previously Presented) A method of Claim 5 wherein said centrifuging of step (e) is a heavy spin.

10. (Previously Presented) A method of Claim 4 wherein displacing said red blood cells, platelet-rich plasma, and platelet-poor plasma is carried out manually.

11. (Previously Presented) A method of collecting and separating a patient's blood and recovering a platelet-rich concentrate comprising:

(a) collecting the patient's blood using a needle set comprising a hollow needle having attached tubing and a fitting adapted to engage a first port in an elongated container fitted with a movable plunger having a second port therein;

(b) transferring said blood through said first port into said elongated container;

(c) centrifuging said blood in said container and separating said blood into platelet-rich plasma and red blood cells;

(d) displacing the red blood cells separated in (c) from said container by moving said plunger towards said first port and expelling said red blood cells into a waste bag through tubing attached to said first port;

(e) removing said waste bag of (d) and centrifuging said platelet-rich plasma remaining in said container and separating a platelet-rich concentrate from a platelet-poor plasma;

(f) attaching a hollow plunger rod having a third port therein to said plunger and displacing the platelet-poor plasma separated in (e) from said container by moving said plunger towards said first port and expelling said platelet-poor plasma through said second port of said plunger and said third port of said plunger rod into a waste bag attached to the plunger rod;

(g) recovering the platelet-rich concentrate separated in (e) and remaining in said container; and

wherein displacing said red blood cells, platelet-rich plasma, and platelet-poor plasma is carried out automatically in centrifuge equipment having facilities for opening said ports.

12. (Previously Presented) A method of Claim 4 wherein said elongated container contains a small amount of a blood anti-coagulant.

13. (Previously Presented) A method of Claim 5 wherein displacing said red blood cells, platelet-rich plasma, and platelet-poor plasma is carried out manually.

14. (Previously Presented) A method of Claim 5 wherein displacing said red blood cells, platelet-rich plasma, and platelet-poor plasma is carried out automatically in centrifuge equipment having facilities for opening said ports.

15. (Previously Presented) A method of Claim 5 wherein said elongated container contains a small amount of a blood anti-coagulant.

16. (Previously Presented) A method of collecting and separating a patient's blood and recovering a platelet-rich concentrate comprising:

(a) collecting the patient's blood using a needle set comprising a hollow needle and a fitting adapted to engage a first port in a container fitted with a movable plunger having a second port therein;

(b) transferring said blood through said first port into said container by moving the plunger away from the first port;

(c) centrifuging said blood in said container and separating said blood into platelet-rich plasma and red blood cells;

(d) displacing the red blood cells from said container by moving said plunger towards said first port and expelling said red blood cells through said first port;

(e) centrifuging said platelet-rich plasma remaining in said container and separating a platelet-rich concentrate from a platelet-poor plasma;

(f) attaching a hollow plunger rod having a third port therein to said plunger and displacing the platelet-poor plasma from said container by moving said plunger towards said first port and expelling said platelet-poor plasma through said second port of said plunger and said third port of said plunger rod; and

(g) recovering the platelet-rich concentrate.

17. (Previously Presented) The method of claim 4, wherein the first port includes a valve, the method further comprising opening the valve prior to the act of transferring said blood.

18. (Previously Presented) The method of claim 16, wherein the first port includes a valve, the method further comprising opening the valve prior to the act of transferring said blood.